WHAT IS CLAIMED IS:

1. A method for enumerating microbial colonies in a sample comprising:

(a) transferring a sample comprising a microbe(s) of interest in a liquid medium to the wells of a multi-well filter plate;

(b) removing excess media from the wells;

(c) allowing sufficient time for the microbe(s) to grow into discrete colonies on residual growth media captured within and under the filter plate; and

(d) enumerating the microbial colonies in the sample by using a means suitable for enumeration of samples in multi-well format.

2. A method in accordance with claim 1 wherein the microbe(s) are bacteria and the microbial colonies are bacterial colonies.

3. A method in accordance with claim 1 wherein the microbe(s) are yeast and the microbial colonies are colonies of yeast.

4. A method in accordance with claim 1 wherein the microbe(s) are fungi and the microbial colonies are fungal colonies.

5. A method in accordance with claim 1 wherein the multi-well filter plate of step (a) comprises growth medium.

6. A method in accordance with claim 1 wherein the multi-well filter plate is a 96 well filter plate.

7. A method in accordance with claim 2 wherein the bacteria are grown on the filter plate for a period of 14-18 hours.

8. A method in accordance with claim 1 wherein the filter plate is a Millipore™ 96 well HV plate.

9. A method in accordance with claim 1 wherein the filter plate is a Millipore™ Multiscreen™ HV 0.45 μm Opaque Sterile Filtration plate.

10. A method in accordance with claim 1 wherein the excess media is removed by vacuum filtration.

11. A method in accordance with claim 1 wherein the excess media is removed by centrifugation.

12. A method in accordance with claim 1 wherein the enumeration of microbial colonies is accomplished with a device capable of acquiring images and/or information from wells in multi-well format.

13. A method in accordance with claim 12 wherein the device is capable of acquiring images and/or information from wells in 96 well format.

14. A method in accordance with claim 12 wherein the number of bacteria in the sample is determined using a computer-assisted video imaging and analysis system.

15. A method in accordance with claim 12 wherein the number of bacteria in the sample is determined using an ImmunoSpot™ Analyzer.

16. A method in accordance with claim 1 wherein the microbe(s) prior to step (a) had been contacted with an antimicrobial agent.

17. A method in accordance with claim 16 wherein the microbe(s) prior to step (a) had been contacted with an antimicrobial antiserum.

18. A method in accordance with claim 16 wherein the microbe(s) prior to step (a) were further contacted with complement or active components thereof.

19. A method in accordance with claim 17 wherein the microbe(s) prior to step (a) were further contacted with an effector cell capable of engulfing the microbe(s).

20. A method in accordance with claim 18 wherein the effector cell is a phagocyte.

21. A method in accordance with claim 18 wherein the effector cell is a differentiated HL-60 cell.

22. A method in accordance with claim 18 wherein the effector cell is a peripheral blood polymorphonuclear leukocyte.

23. A method in accordance with claim 2 wherein the bacteria is a gram-positive bacteria.

24. A method in accordance with claim 2 wherein the bacteria is a gram-negative bacteria.

25. A method in accordance with claim 2 wherein the bacteria is a pathogenic microorganism.

26. A method in accordance with claim 2 wherein the bacteria is *Streptococcus pneumoniae.*

27. A method in accordance with claim 2 wherein the bacteria is *Neisseria meningitidis.*

28. A method in accordance with claim 2 wherein the bacteria is *Escherichia coli.*

29. A method in accordance with claim 2 wherein the bacteria is *Staphylococcus aureus.*

30. A method in accordance with claim 2 wherein the bacteria is *Bacillus anthracis.*

31. A method for analyzing microbe(s), their growth and/or viability in a sample comprising:

(a) transferring a sample comprising a microbe(s) of interest in a liquid medium to the wells of a multi-well filter plate;

(b) removing excess media from the wells;

(c) allowing sufficient time for the microbe(s) to grow into discrete colonies on residual growth media captured within and under the filter plate; and

(d) analyzing the microbe(s), their growth and/or viability in the sample by a means suitable for analysis of samples in multi-well format.

32. A method in accordance with claim 30 wherein the microbe(s) are bacteria.

33. A method in accordance with claim 30 wherein the microbe(s) are yeast.

34. A method in accordance with claim 30 wherein the microbe(s) are fungi.

35. A method in accordance with claim 30 wherein the multi-well filter plate of step (a) comprises growth medium.

36. A method in accordance with claim 33 wherein the multi-well filter plate is a 96 well filter plate.

37. A method in accordance with claim 31 wherein the bacteria are grown for a period of 14-18 hours.

38. A method in accordance with claim 30 wherein the filter plate is a Millipore™ 96 well HV plate.

39. A method in accordance with claim 30 wherein the filter plate is a Millipore™ Multiscreen™ HV 0.45 μm Opaque Sterile Filtration plate.

40. A method in accordance with claim 30 wherein the excess media is removed by vacuum filtration.

41. A method in accordance with claim 30 wherein the excess media is removed by centrifugation.

42. A method in accordance with claim 30 wherein microbe(s), their growth and/or viability is analyzed with a device capable of acquiring images and/or information from wells in multi-well format.

43. A method in accordance with claim 40 wherein the device is capable of acquiring images and/or information from wells in 96 well format.

44. A method in accordance with claim 41 wherein the number of bacteria in the sample is determined using a computer-assisted video imaging and analysis system.

45. A method in accordance with claim 41 wherein the microbe(s) are analyzed using an ImmunoSpot™ Analyzer.

46. A method in accordance with claim 30 wherein the microbe(s) prior to step (a) had been contacted with an antimicrobial agent.

47. A method in accordance with claim 30 wherein the microbe(s) prior to step (a) had been contacted with antimicrobial antiserum.

48. A method in accordance with claim 44 wherein the microbe(s) prior to step (a) were further contacted with complement or active components thereof.

49. A method in accordance with claim 45 wherein the microbe(s) prior to step (a) were further contacted with an effector cell capable of engulfing the microbe(s).

50. A method in accordance with claim 46 wherein the effector cell is a phagocyte.

51. A method in accordance with claim 46 wherein the effector cell is a differentiated HL-60 cell.

52. A method in accordance with claim 46 wherein the effector cell is a peripheral blood polymorphonuclear leukocyte.

53. A method in accordance with claim 31 wherein the bacteria is a gram-positive bacteria.

54. A method in accordance with claim 31 wherein the bacteria is a gram-negative bacteria.

55. A method in accordance with claim 31 wherein the bacteria is a pathogenic microorganism.

56. A method in accordance with claim 31 wherein the bacteria is *Streptococcus pneumoniae.*

57. A method in accordance with claim 31 wherein the bacteria is *Neisseria meningitidis.*

58. A method in accordance with claim 31 wherein the bacteria is *Escherichia coli.*

59. A method in accordance with claim 31 wherein the bacteria is *Staphylococcus aureus.*

60. A method in accordance with claim 31 wherein the bacteria is *Bacillus anthracis.*

61. A method for evaluating antimicrobial agents comprising:

(a) contacting a sample comprising a microbe(s) of interest with the antimicrobial agent;

(b) transferring the sample comprising the microbe(s) of interest in a liquid medium to the wells of a multi-well filter plate;

(c) removing excess media from the wells;

(d) allowing sufficient time for the microbe(s) to grow into discrete colonies on residual growth media captured within and under the filter plate; and

(e) evaluating the effect of the antimicrobial agent on the growth and/or viability of the microbe(s) with a means suitable for analysis of samples in multi-well format.

62. A method for evaluating antimicrobial agents comprising:

(a) transferring a sample comprising a microbe(s) of interest in a liquid medium to the wells of a multi-well filter plate;

(b) contacting the sample comprising the microbe(s) of interest with the antimicrobial agent;

(c) removing excess media from the wells;

(d) allowing sufficient time for the microbe(s) to grow into discrete colonies on residual growth media captured within and under the filter plate; and

(e) evaluating the effect of the antimicrobial agent on the growth and/or viability of the microbe(s) with a means suitable for analysis of samples in multi-well format.

63. A method in accordance with claim 59 wherein the antimicrobial agent is a monoclonal antibodies present within hybridoma culture supernatant.